

Figure 1

(Prior Art)

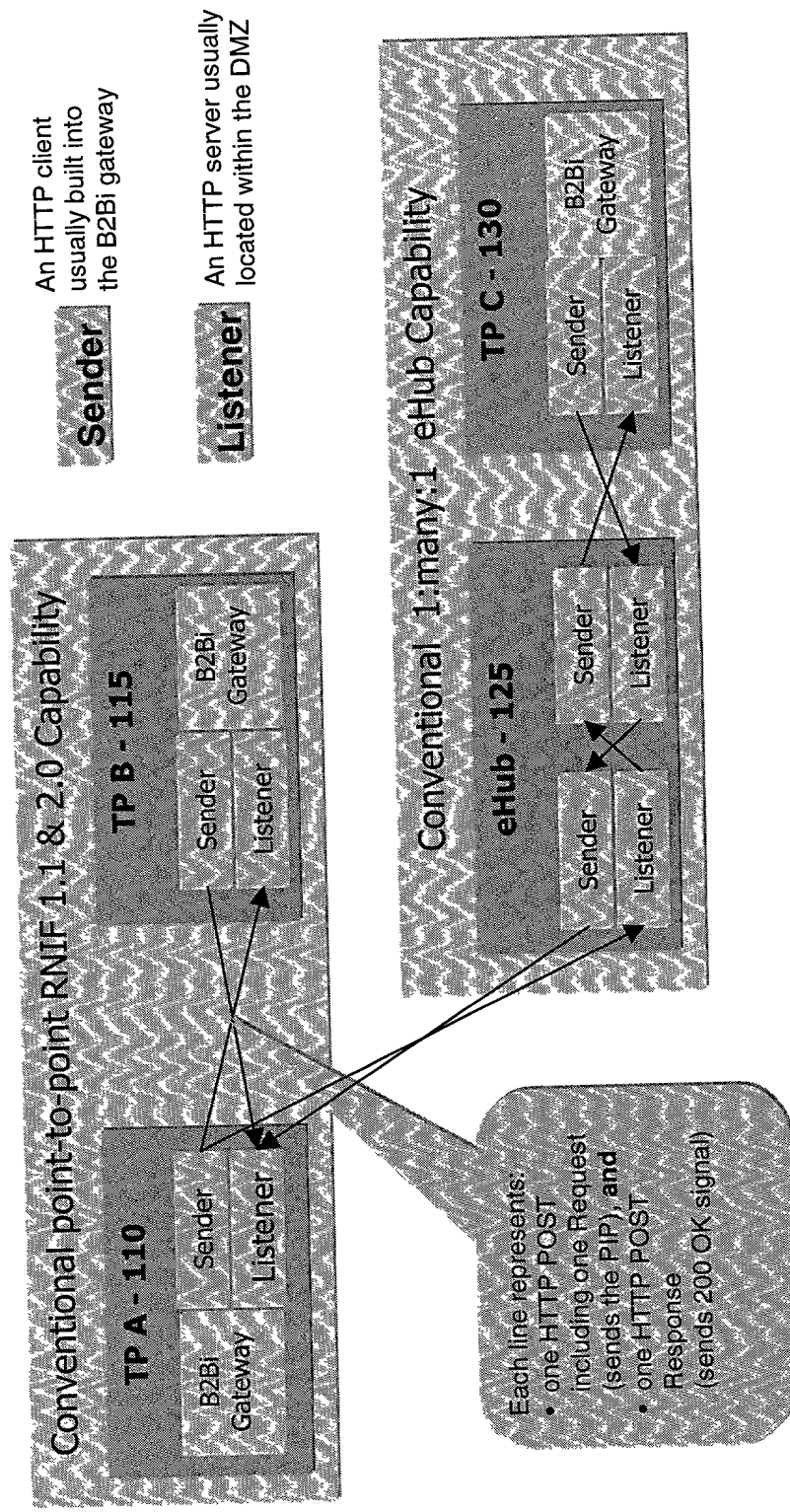


Figure 2

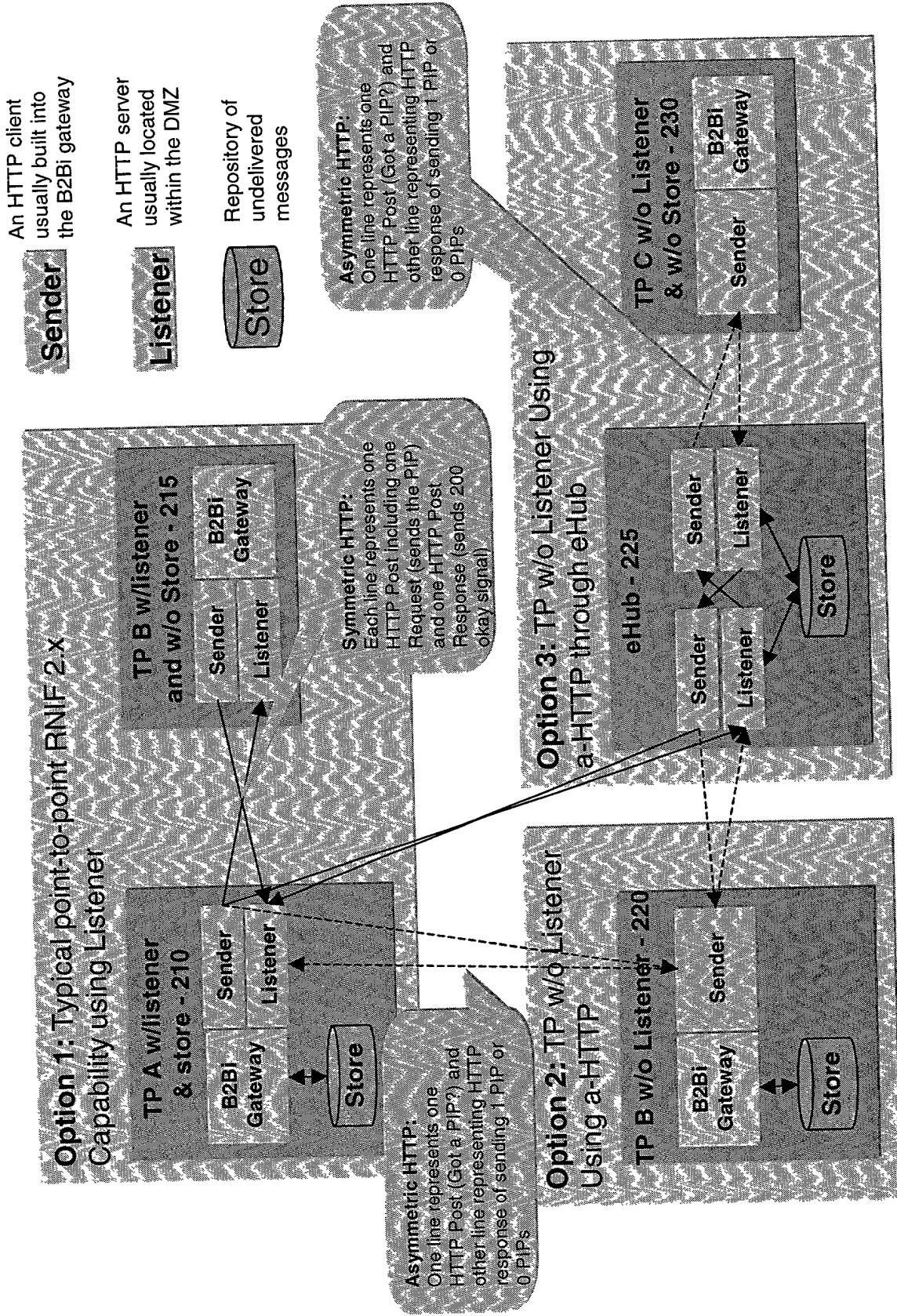
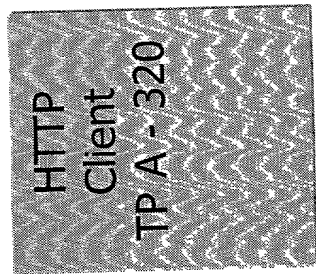
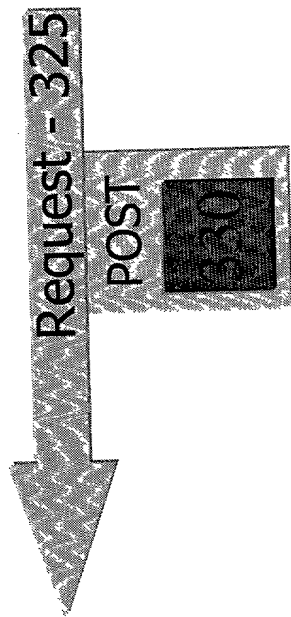
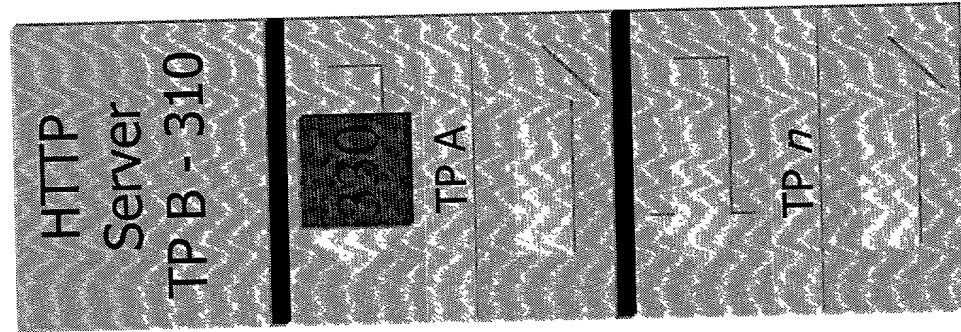
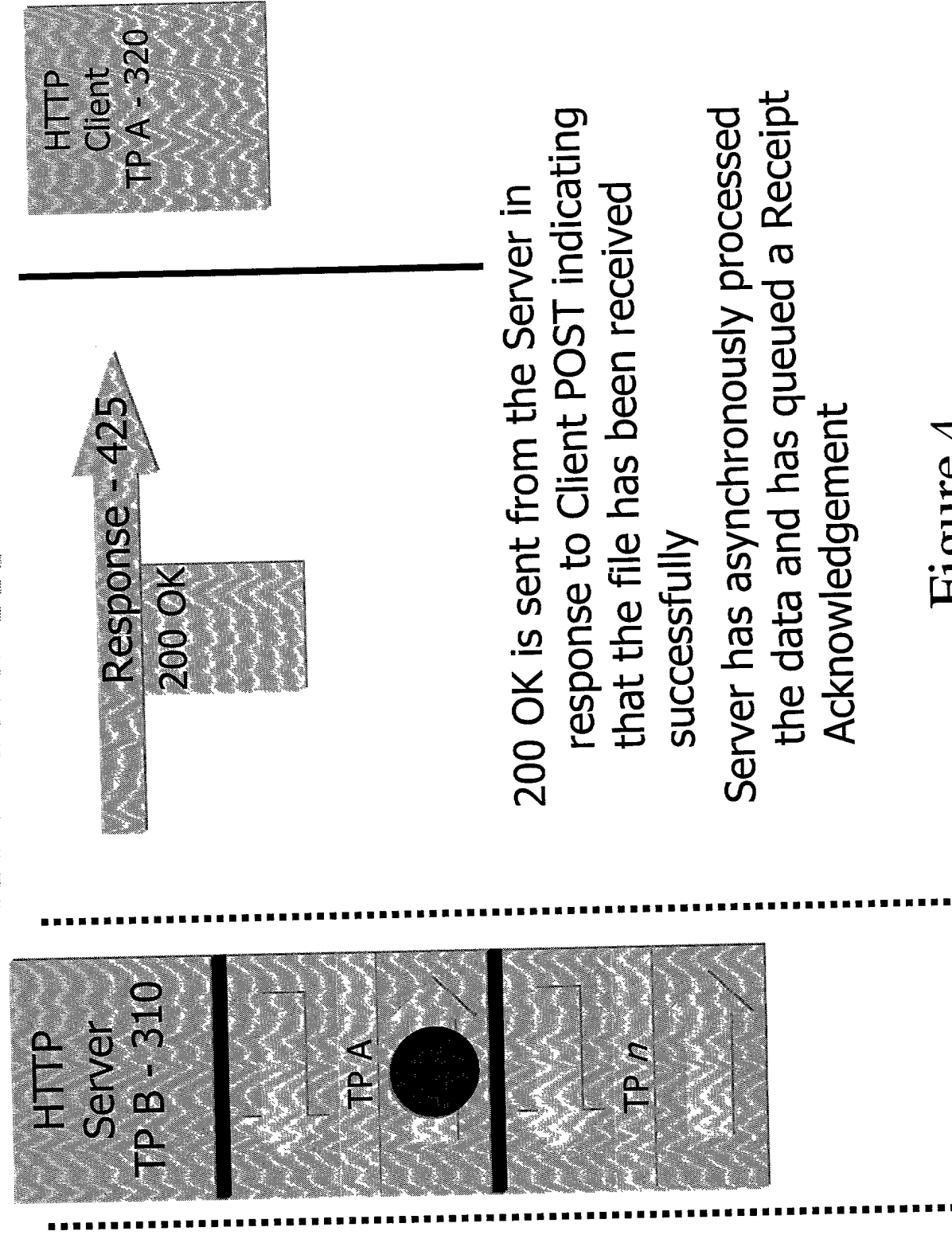


Figure 3: Client sends PIP Business Message Request as a POST to Server



Client sends PIP Business Message Request as a POST to Server

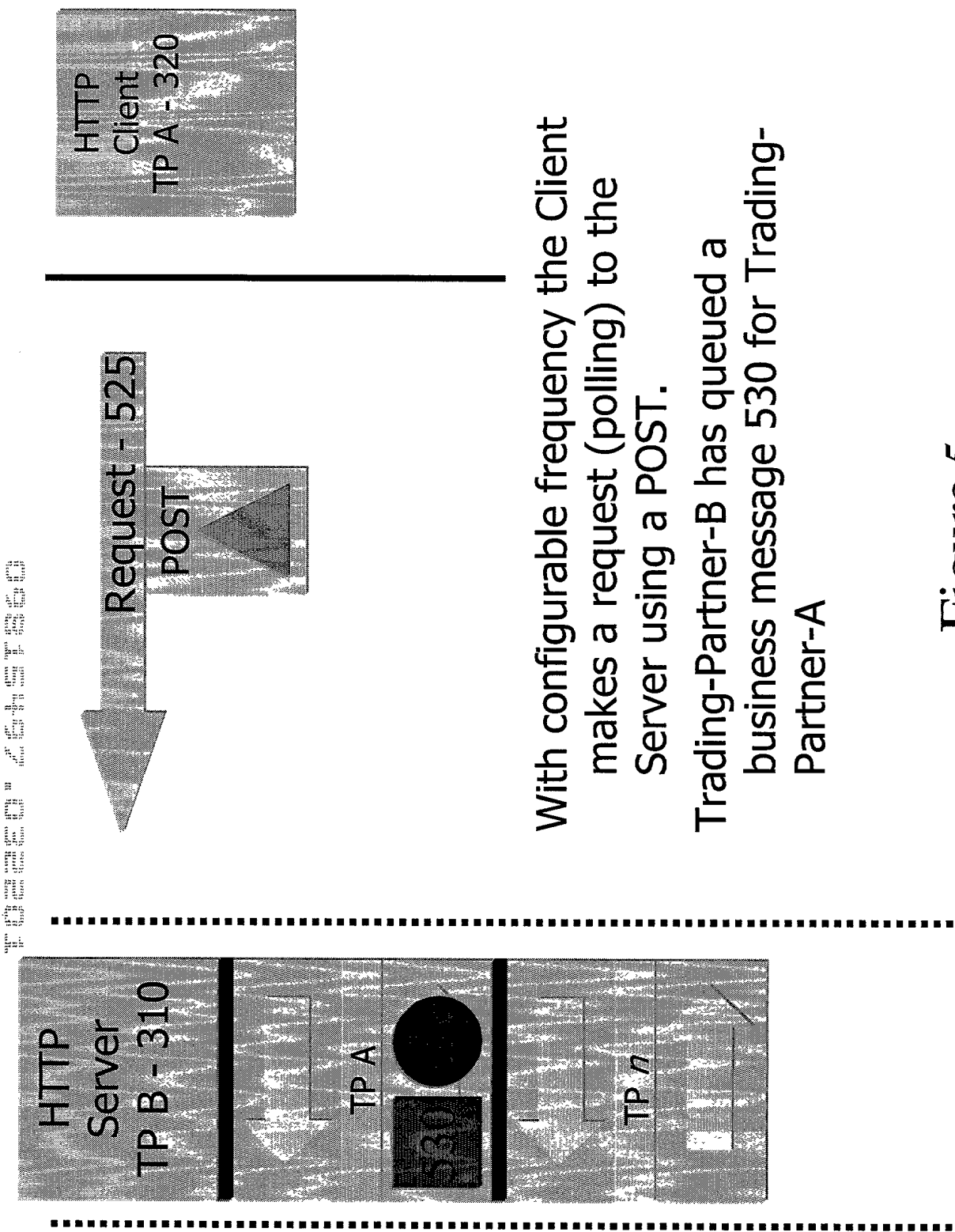
Figure 3



200 OK is sent from the Server in response to Client POST indicating that the file has been received successfully

Server has asynchronously processed the data and has queued a Receipt Acknowledgement

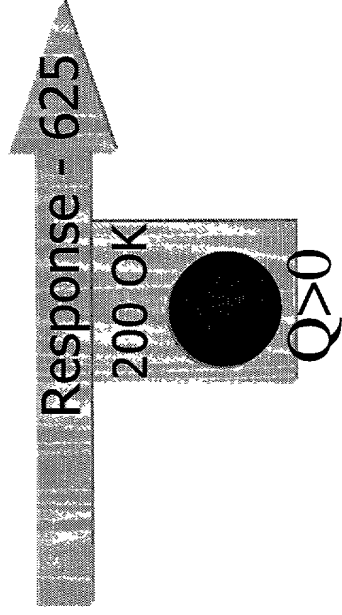
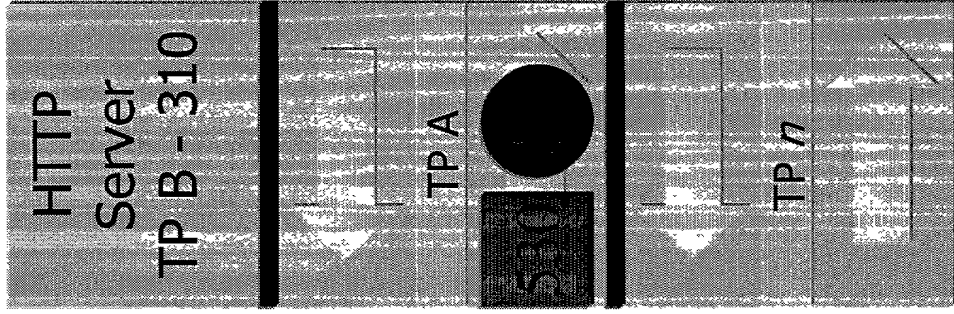
Figure 4



With configurable frequency the Client makes a request (polling) to the Server using a POST. Trading-Partner-B has queued a business message 530 for Trading-Partner-A

Figure 5

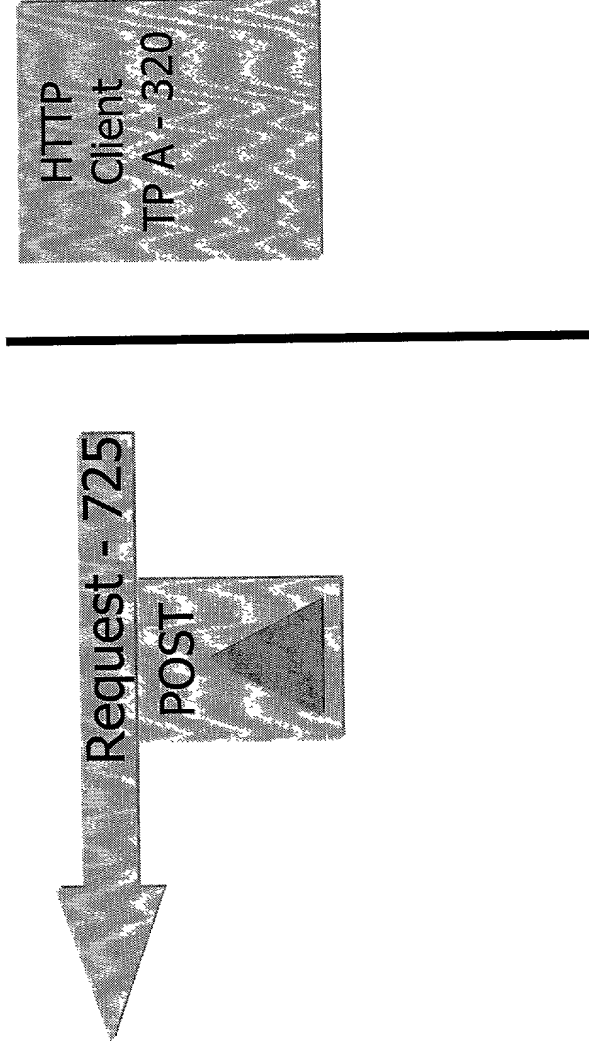
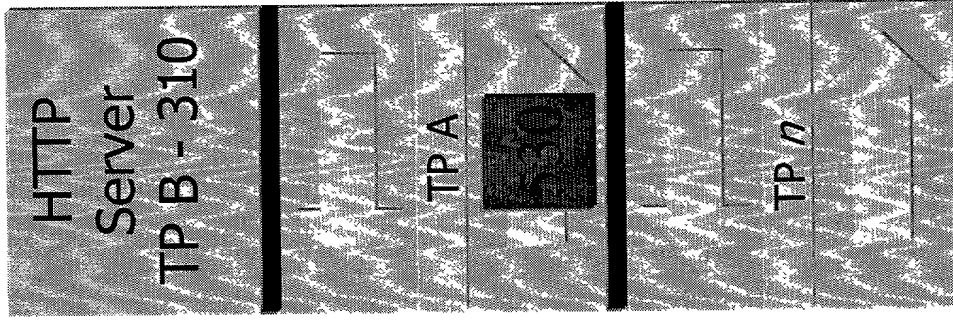
Figure 6: HTTP Server and Client interaction



The Server sends the Receipt Acknowledgement within the HTTP response

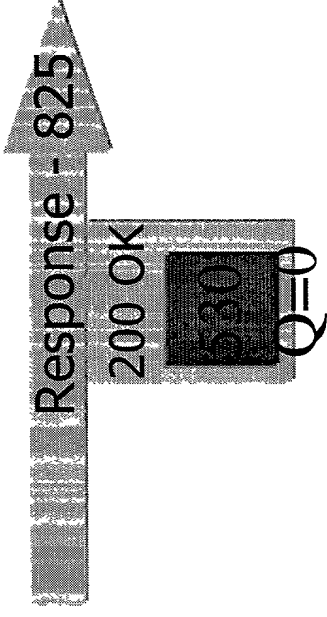
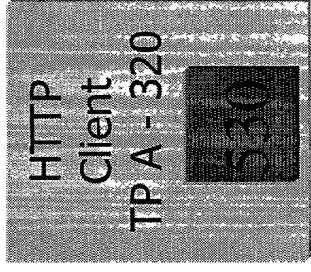
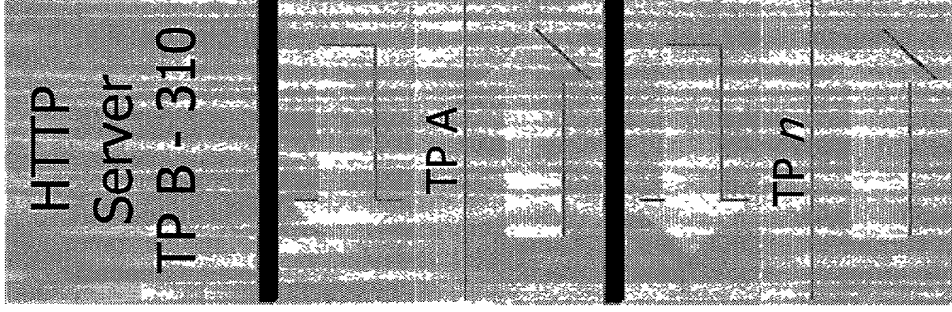
Additionally, the Server sends some information that tells the Client that the server queue is not empty

Figure 6



The Client 320, knowing that the server queue is not empty, polls the server again with a POST to retrieve the next item in the server queue

Figure 7



The business message is sent in the response to the Client

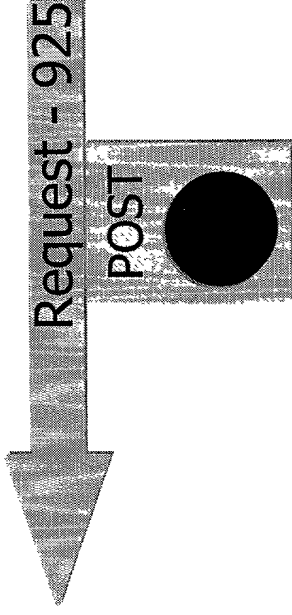
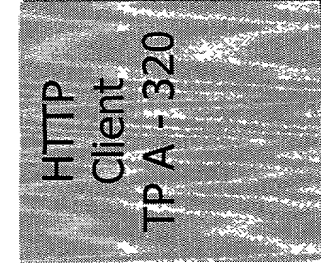
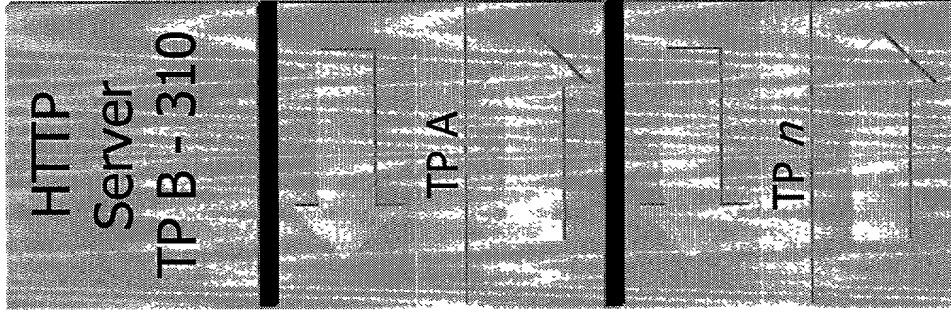
PIP is initiated (timers begin) when business message is delivered

The Server also tells the Client that the queue is empty

The Client sleeps until it needs to send something or it is time to poll again

Figure 8

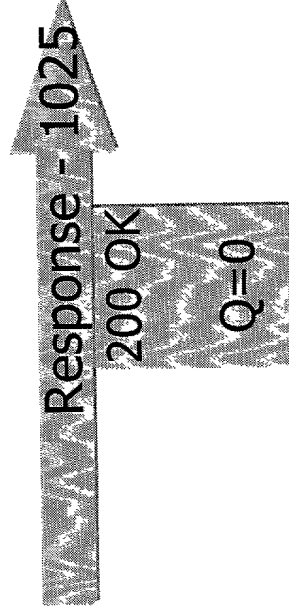
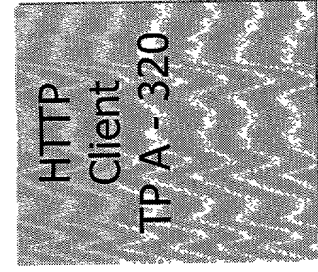
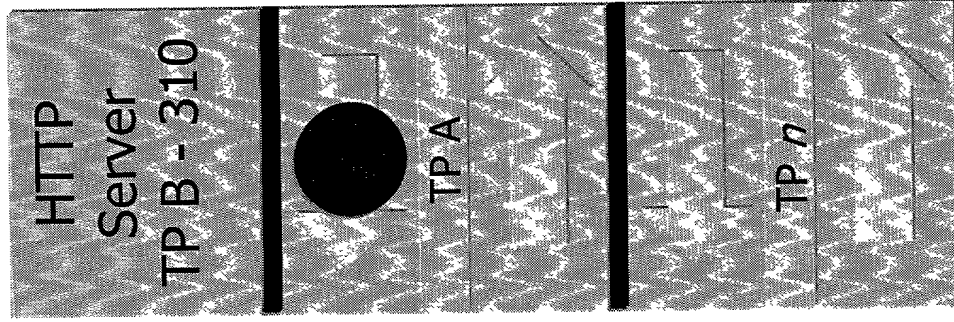
Figure 9: The Client sends the Receipt Acknowledgement to the Server



The Client sends the Receipt Acknowledgement to the Server

Figure 9

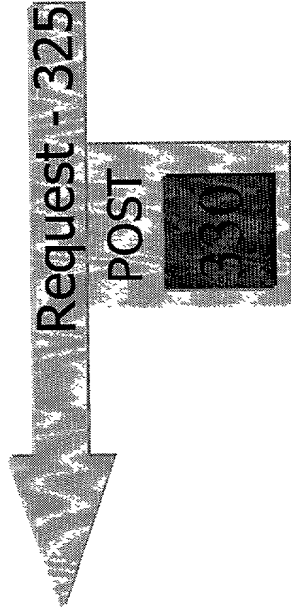
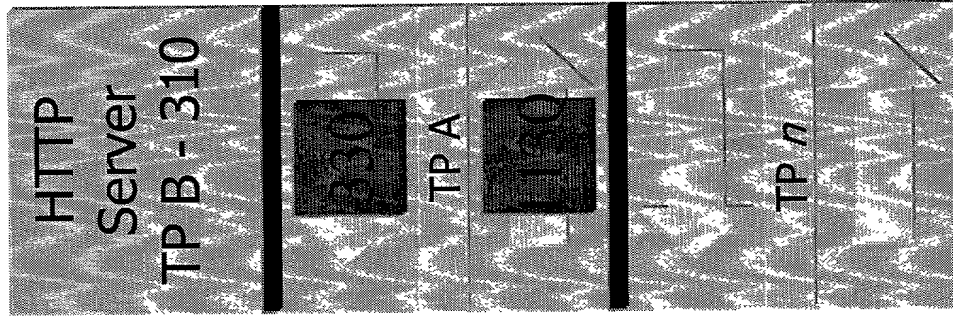
Figure 10: HTTP Server and Client interaction. The server responds with a 200 OK status code and an empty queue (Q=0).



The Server responds with an empty 200 OK (nothing is in the queue)

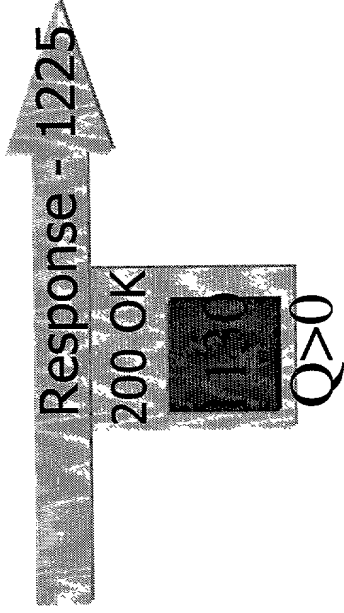
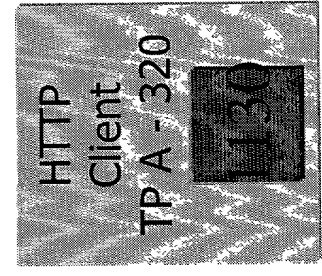
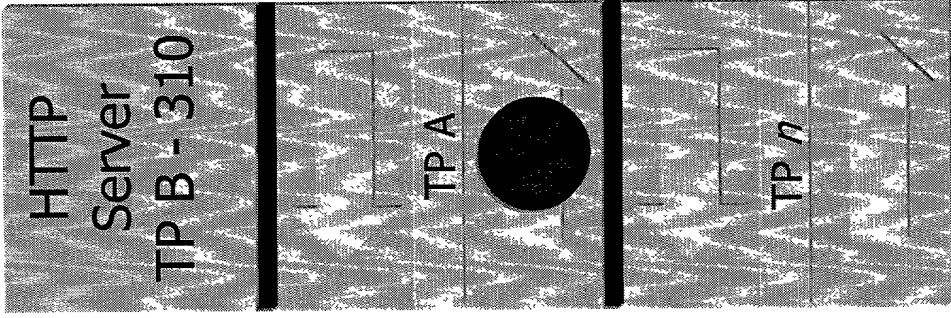
Figure 10

Figure 11: Client sends PIP Business Message Request as a POST to Server



Client sends PIP Business Message Request as a POST to Server

Figure 11



200 OK is sent from the Server in response to Client POST indicating that the file has been received successfully. Queued message is attached and sent back to Client

Server has asynchronously processed the data and has queued a Receipt Acknowledgement

Figure 12

Figure 13

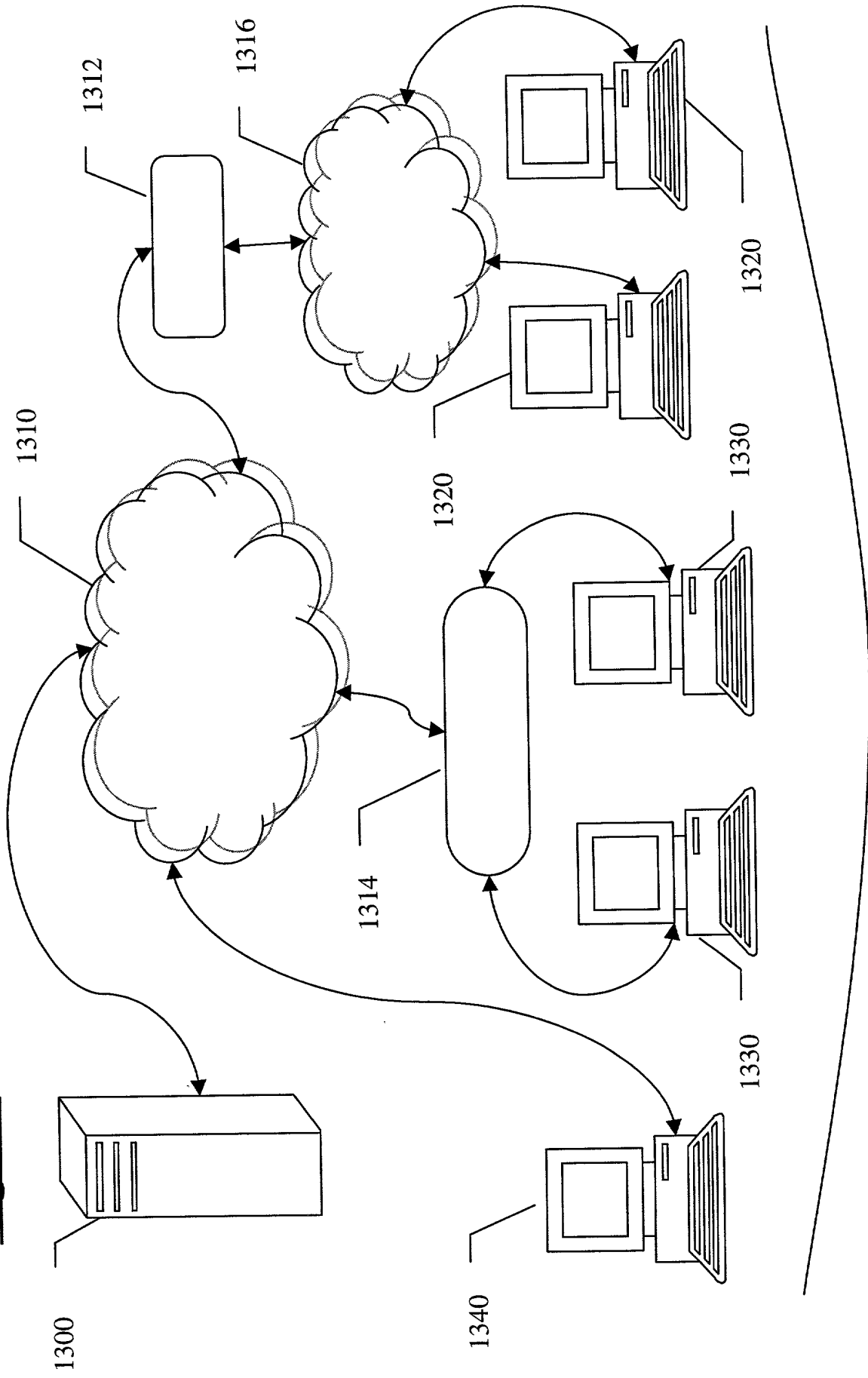


Figure 14a

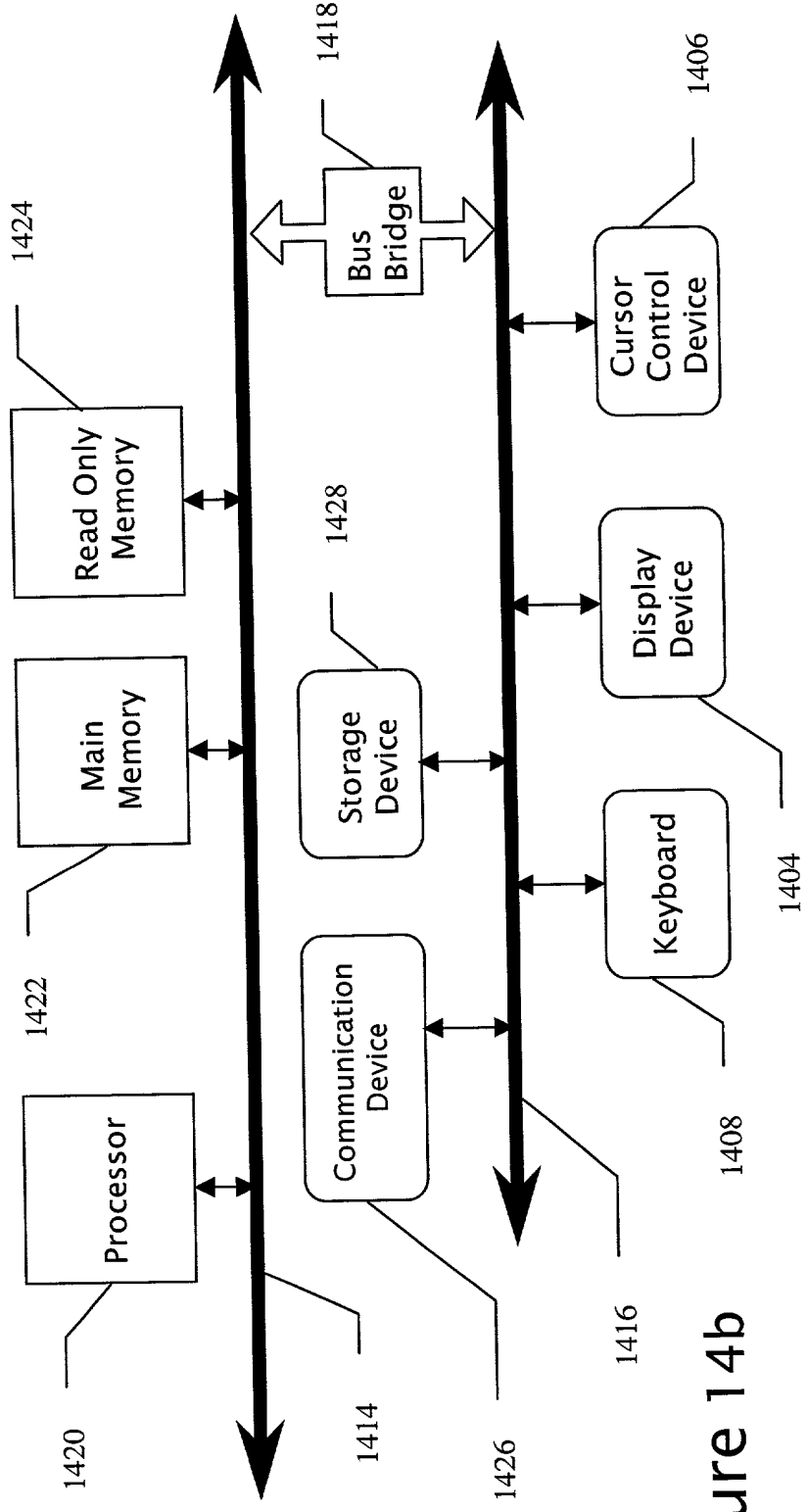
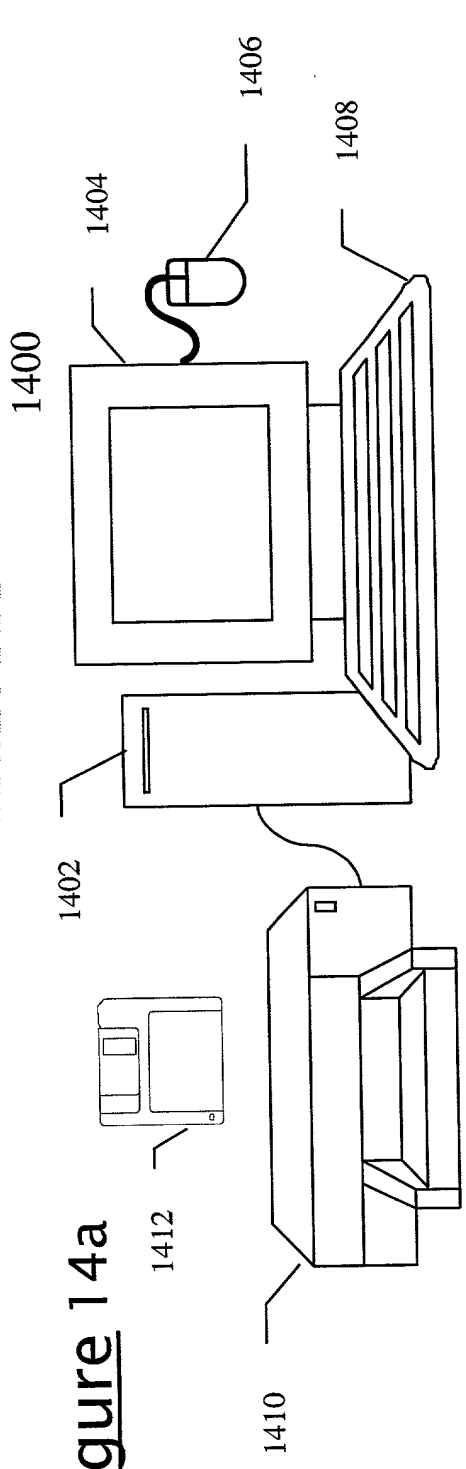


Figure 14b